

Work Order ID 106135

August-28-13 1:14:02 PM

106135

Page 1

Item ID: D3121-141

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bracket Assembly

Stop

NS2

Start Date: 8/28/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 8/28/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan: MLSDate: 13-08-28

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3121	Rev E								
100		0.00							
100	BAND SAW								
Bandsaw									
Jeaspa Bandsaw									
	Memo	0.00							
	Cut blanks: (1.250" x 2.000") 6.600" long								
110		0.00							
110	HAAS CNC VERTICAL MACHINING #1								
HAAS 1									
HAAS CNC vertical machine #1									
	Memo	0.00							
	1-Machine D3121-111 as per Folio FA361 and Dwg D3121 Identify as D3121-1112-Deburr3-Scribe batch number								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC									
Quality Control									
	Memo	0.00							

12 *SL/SL* *13-09-17* *SL/SL* *13-09-17**12* *SL/SL* *13-09-17**12* *SL/SL* *13-09-17*

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Part No. _____ NCR No. _____			<input type="checkbox"/> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update	<input type="checkbox"/> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab	<input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite	<input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier	<input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data												
Equip/Tooling												
Operator												
Material												
Setup												
Other												
Process												
Supplier												
Training												
Unapproved												
FAULT CATEGORY												
Landing Gear	<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<input type="checkbox"/> General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio		<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge			<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	
											<input type="checkbox"/> Other	

Work Order ID 106135

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106135

Page 2

Item ID: D3121-141

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Bracket Assembly

Stop

NS2

Start Date: 8/28/13 Start Qty: 12.00

12

Cust Item ID:

Required Date: 8/28/13 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00

5.8 13/09/18

12

6

DAS

08

9-89

130

QC

Memo

0.00

Quality Control

140

Small Fab

0.00

12x

Sp 13/09/19

140

Small Fab

Memo

0.00

Small Fab

Assemble D3121-141 as per Dwg D3121.

150

QC5- Inspect part completeness to step on W/O

0.00

DAS
16
9-89

13/09/19

12

150

QC

Memo

0.00

Quality Control

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework	<input type="checkbox"/>	Skid-tube	<input type="checkbox"/>	Crosstube	<input type="checkbox"/>	Water Jet	<input type="checkbox"/>	Engineering
NCR No. _____	Scrap	<input type="checkbox"/>	Machining	<input type="checkbox"/>	Small Fab	<input type="checkbox"/>	Prod. Eng. Coor.	<input type="checkbox"/>	Quality
	Use-as-is	<input type="checkbox"/>	Thermoforming	<input type="checkbox"/>	Finishing	<input type="checkbox"/>	Rec/Store/Packaging	<input type="checkbox"/>	Other
	Work Order Update	<input type="checkbox"/>	Large Fab	<input type="checkbox"/>	Composite	<input type="checkbox"/>	Supplier	<input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear		General									
<input type="checkbox"/>	Bending	<input type="checkbox"/>	Bend	<input type="checkbox"/>	Grain	<input type="checkbox"/>	Ovalized	<input type="checkbox"/>	Pressure/Forced		
<input type="checkbox"/>	Centre Not Concentric to O/S	<input type="checkbox"/>	BOM/Route	<input type="checkbox"/>	Hardware	<input type="checkbox"/>	Over/Under tolerance	<input type="checkbox"/>	Temperature/Cure		
<input type="checkbox"/>	Cracks	<input type="checkbox"/>	Broken/Damaged	<input type="checkbox"/>	Inspection Incomplete	<input type="checkbox"/>	Part Incorrect	<input type="checkbox"/>	Weld		
<input type="checkbox"/>	Crushed/Crimped	<input type="checkbox"/>	Burrs	<input type="checkbox"/>	Instructions Incomplete/Unclear	<input type="checkbox"/>	Part Lost/Missing	<input type="checkbox"/>	Wrong Stock Pulled		
<input type="checkbox"/>	Cuffs	<input type="checkbox"/>	Contamination	<input type="checkbox"/>	Maintenance	<input type="checkbox"/>	Part Moved	<input type="checkbox"/>			
<input type="checkbox"/>	Heat Treat	<input type="checkbox"/>	Countersink	<input type="checkbox"/>	Mislabeled	<input type="checkbox"/>	Positioned Wrong	<input type="checkbox"/>			
<input type="checkbox"/>	Inspection Strip in Tube	<input type="checkbox"/>	Cut Too Short	<input type="checkbox"/>	Misread	<input type="checkbox"/>	Power Loss/Surge	<input type="checkbox"/>	Other		
<input type="checkbox"/>	Ripples in Bend	<input type="checkbox"/>	Drill Holes	<input type="checkbox"/>	Offset	<input type="checkbox"/>		<input type="checkbox"/>			
<input type="checkbox"/>	Torque Waves in Extrusion	<input type="checkbox"/>	Drawing	<input type="checkbox"/>	Out of Calibration	<input type="checkbox"/>		<input type="checkbox"/>			
<input type="checkbox"/>	Turning Sequence	<input type="checkbox"/>	Finish	<input type="checkbox"/>	Out of Sequence	<input type="checkbox"/>		<input type="checkbox"/>			
<input type="checkbox"/>	Wave/Twist in Tube	<input type="checkbox"/>	Folio	<input type="checkbox"/>	Outside Dimensions	<input type="checkbox"/>		<input type="checkbox"/>			

Work Order ID 106135

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Item ID:	D3121-141	Accept	*N900040100*	Setup	Start	*NS1*	
Revision ID:					Stop	*NS2*	
Item Name:	Bracket Assembly						
Start Date:	8/28/13	Start Qty:	12.00	*12*	Cust Item ID:		
Required Date:	8/28/13	Req'd Qty:	12.00	*12*	Customer:		
Reference:							
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* Packaging	Identify as per dwg & Stock Location: <u>ST235A</u>	0.00							<u>DAS</u>
	Memo	0.00							<u>12X</u>
170 *170* QC	QC21- Final Inspection - Work Order Release	0.00							<u>13-09-20</u>
	Memo	0.00							

10/13-09-20

10/13-09-20

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS								
Part No. _____	Work Order Update	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>					
NCR No. _____					Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>					
					Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>					
					Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>						
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Doc/Data													
Equip/Tooling													
Operator													
Material													
Setup													
Other													
Process													
Supplier													
Training													
Unapproved													
FAULT CATEGORY													
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio		<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside-Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	

Picklist Print

August-28-13 1:14:02 PM

Page 1

Work Order ID: 106135
 Parent Item: D3121-141 Start Date: 8/28/13 Required Date: 8/28/13
 Parent Item Name: Bracket Assembly Start Qty: 12.00 Required Qty: 12.00

Comments: IPP Rev:Pick:A04.02.18New issueKJ/DS
 IPP Rev:B ECN 1060 07-11-12 DD verified by: EC
 IPP Rev:C New Dimensions for Blank Size 08-07-23 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3121-241 Bearing Assembly		Manufactured	No			100	Each	29.0000	1	12			EP 5/3/09/19
-------------------------------	--	--------------	----	--	--	-----	------	---------	---	----	--	--	--------------

Location Loc Qty Loc Code

FG	14	
89826	4	
95927	10	
ST235	11	
103892	11	
ST235A	4	
102098	2	
102693	2	

D3121-21 Bolt		Manufactured	No			140	Each	50.0000	1	12			EP 5/3/09/19
------------------	--	--------------	----	--	--	-----	------	---------	---	----	--	--	--------------

Location Loc Qty Loc Code

ST235	50	
102053	1	
102765	45	
99292	4	

M174B1.250X02.000 17-4 SS Bar 1.250 x 2.00		Purchased	No			140	f	22.4000	0.55	6.9473688			SL 139-15
---	--	-----------	----	--	--	-----	---	---------	------	-----------	--	--	-----------

Location Loc Qty Loc Code

MAT049	22.4	
114899	2	
M126132 X9	20.4	

44.95

126866X3

1.65

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

DART AEROSPACE LTD		Work Order:	106135
Description: Bracket		Part Number:	D3121-111
Inspection Dwg: D3121	Rev: E		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

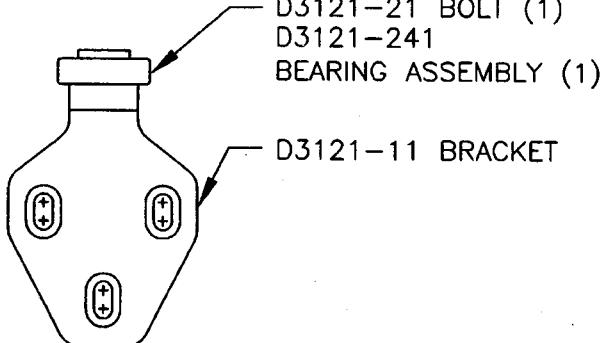
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.392	+0.002/-0.000	3928	/		mic	SL-4
0.75	+/-0.030	.750	/		Vern	SL-10
0.375	+/-0.010	.375	/			
2.14	+/-0.030	2.136	/			
1.96	+/-0.030	1.961	/			
0.280	+/-0.010	.278	/			
3.330	+/-0.010	3.320	/			
3.630	+/-0.010	3.626	/			
R0.25	+/-0.030	.25	/			
R0.375	+/-0.010	.375	/			
Ø0.201	+0.005/-0.001	.201	/			
0.100	+/-0.010	.098	/			
4.580	+/-0.010	4.576	/			
6.18	+/-0.030	6.182	/		AG	
5.89	+/-0.030	5.892			Vern	SL-16
0.080	+/-0.010	.080	/			
0.300	+/-0.010	.299	/			
30°	+/-0.1°	30°	/			
R0.25	+/-0.030	.250	/			
0.130	+/-0.010	.127	/			
0.664	+/-0.010	.664				
0.381	+/-0.010	.383				
0.201	+/-0.010	.199				
0.400	+/-0.010	.396				
0.580	+/-0.010	.582				
100°	+/-0.1°	100°	/			
0.032	+0.000/-0.010	.027	/		AG	SL-7

Measured by:	SL	Audited by:	SL (DAS)	Prototype Approval:	N/A
Date:	13-10-16	Date:	13/09/18 08:08	Date:	N/A

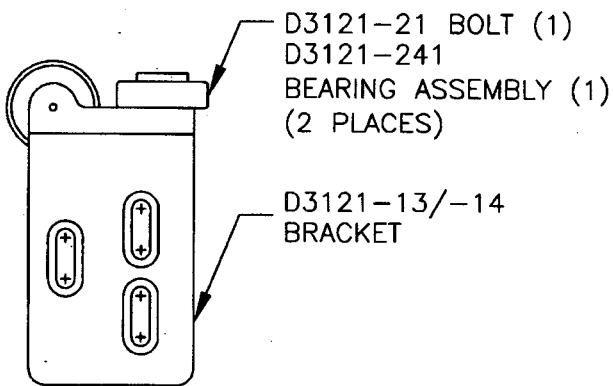
Rev	Date	Change	Revised by	Approved
A	04.01.12	New Issue P/O D3121-141	KJ/RF	
B	04.05.05	Dimensions changed/re-arranged per Dwg revision	KJ/JLM	
C	06.06.14	Dwg Rev. updated	KJ/JLM	
D	08.01.16	Dimensions updated per Dwg Rev. E	KJ/EC/DD	
E	08.05.28	Tolerance revised for Ø0.201 dimension	KJ/DD	DD

DART

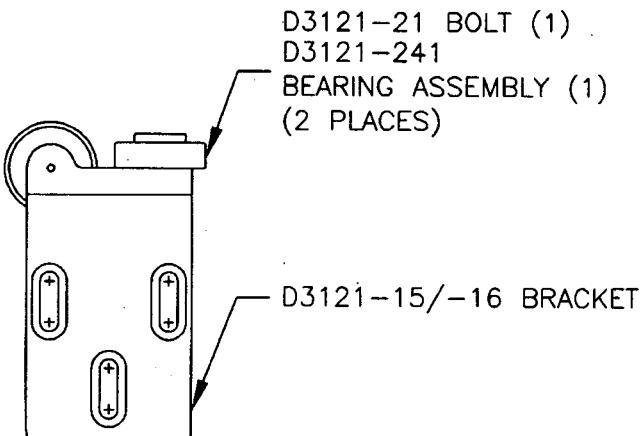
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CHECKED	APPROVED	DRAWING NO. D3121
		REV. E
DATE		SHEET 1 OF 10
07.11.07		SCALE 1:2
A	02.04.15	NEW ISSUE
B	03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146
C	04.02.17	ADD CLEARANCE; USE -241 BEARING
D	06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000
E	07.11.07	ADD TOLERANCE TO 0.032 (DETAIL B)

RELEASED
07.11.07**D3121-041 BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-33)

**D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-37/-38)

**D3121-045 (SHOWN) / D3121-046 (OPPOSITE) BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-35/-36)

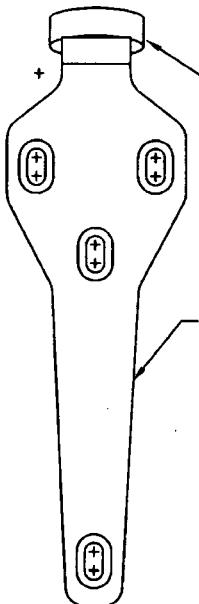
13-08-2007
NO. 106135
WORK ORDER NO. 4
SPECIAL TO AND FOR
INCONTRAIL LTD (CON)
ENGINEERING
CUTTING
SHEET COPY
PRINTED
BY DART

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DART

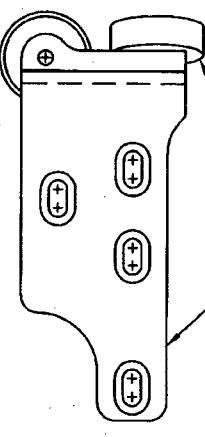
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CHECKED	APPROVED	DRAWING NO. D3121
DATE		REV. E SHEET 2 OF 10
07.11.07		SCALE 1:2



D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)

D3121-141 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23001-01)

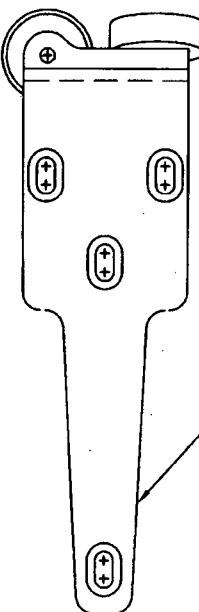
RELEASED
07.11.07 M



D3121-21 BOLT (1)
D3121-241 BEARING ASSEMBLY (1)
(2 PLACES)

D3121-113/-114 BRACKET

**D3121-143 (SHOWN) / D3121-144 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-03/-04)



D3121-21 BOLT (1)
D3121-241 BEARING ASSEMBLY (1)
(2 PLACES)

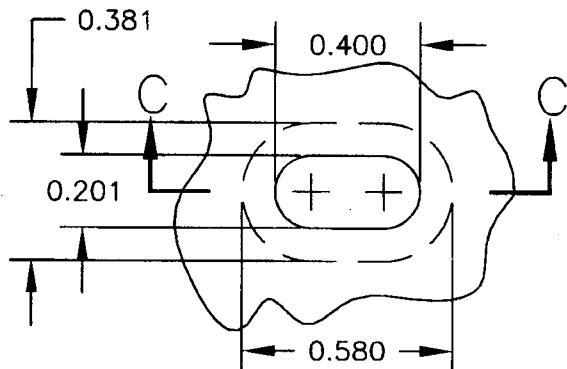
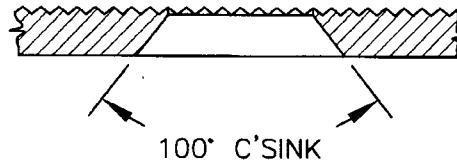
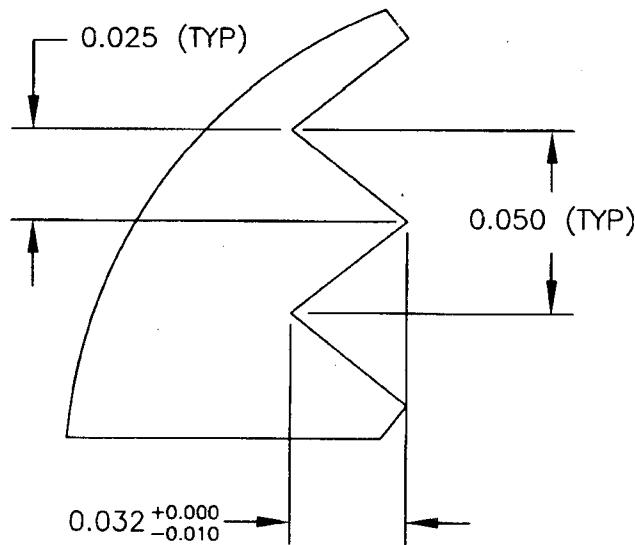
**D3121-145 (SHOWN) / D3121-146 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-05/-06)

D3121-115/-116
BRACKET

106135

DART

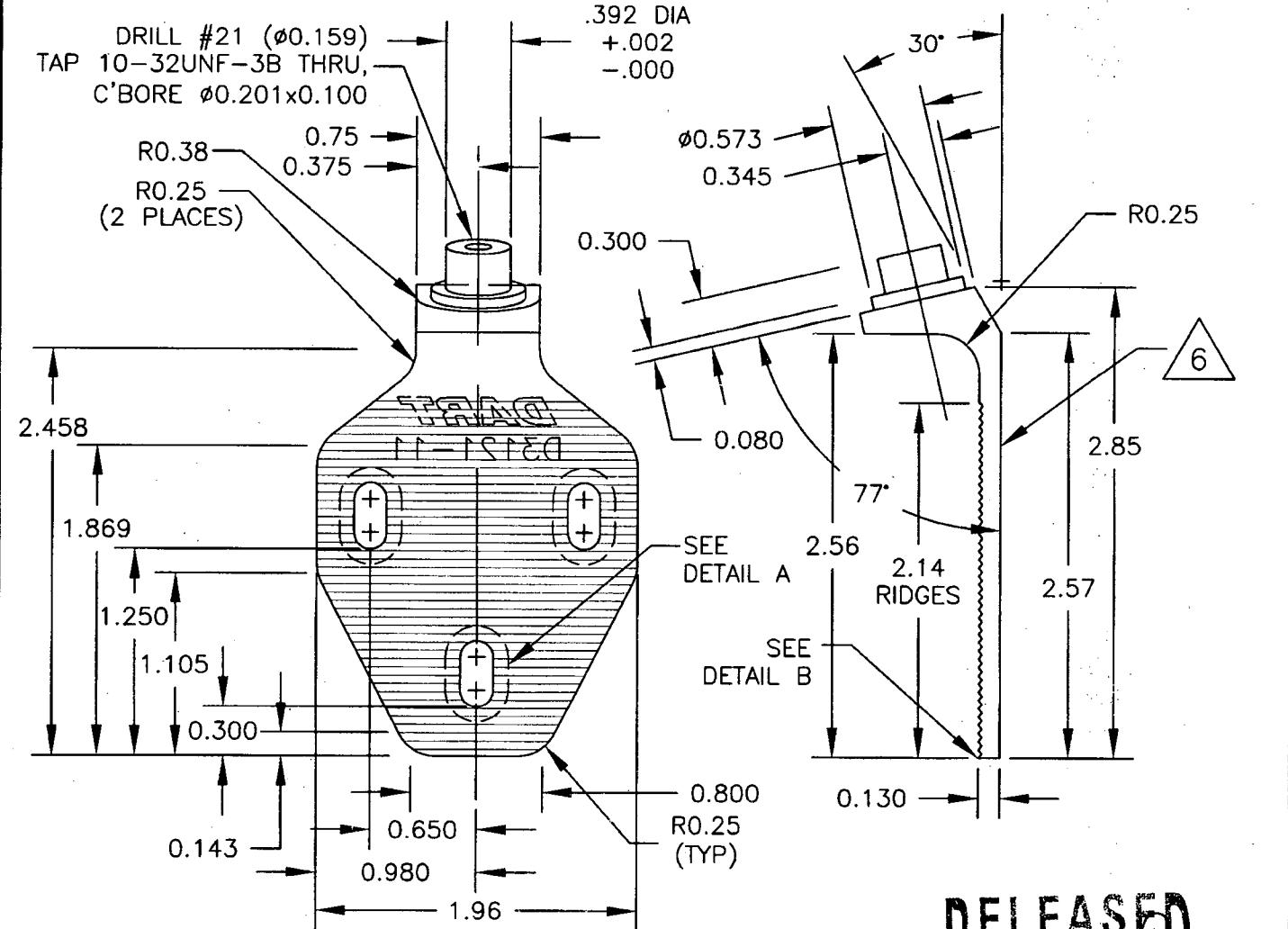
DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. E
		D3121	SHEET 3 OF 10
DATE	TITLE	SCALE	
07.11.07	BRACKET ASSEMBLY	1:1	

**DETAIL A:
SLOT DETAIL**SCALE 2:1
VIEW ROTATED**SECTION
C-C****RELEASED**
07.11.07**DETAIL B:
RIDGE DETAIL**
PARTIAL SECTION
SCALE 1:20

106/135

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD	
	LE	HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. E
		D3121	SHEET 4 OF 10
DATE		TITLE	SCALE
07.11.07		BRACKET ASSEMBLY	1:1

**D3121-11 BRACKET**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

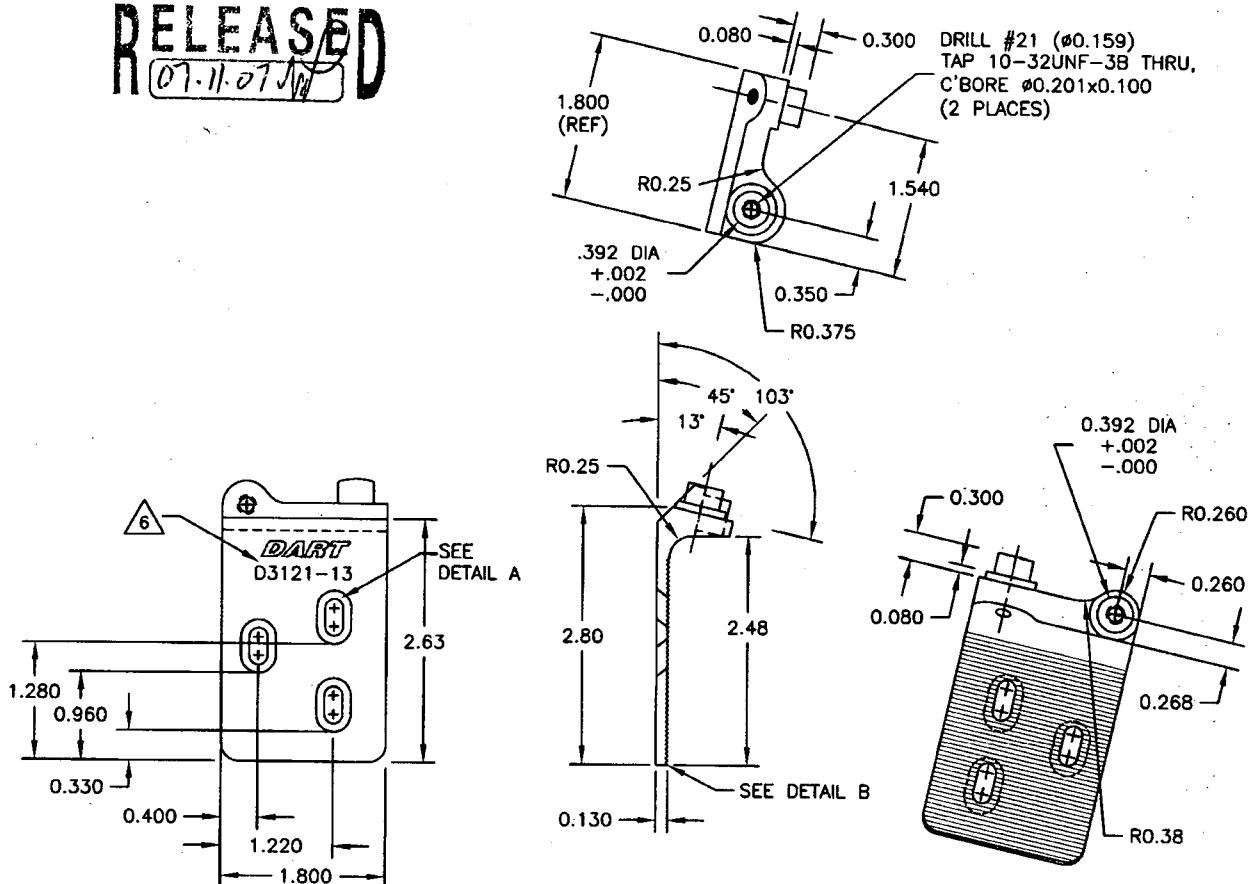
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55/901
135

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3121
DATE		REV. E SHEET 5 OF 10 TITLE SCALE 1:2

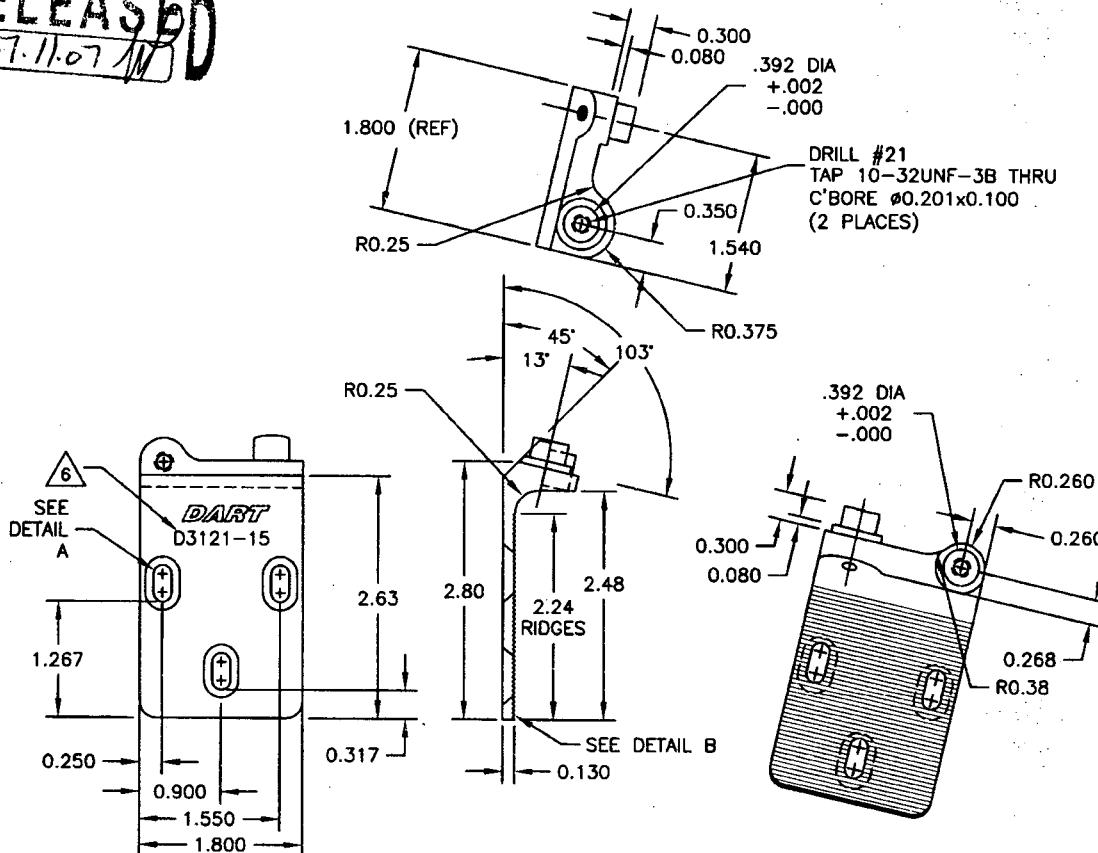
RELEASED
(07.11.07)**D3121-13 BRACKET (SHOWN)****D3121-14 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

10615

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3121
DATE		REV. E SHEET 6 OF 10 SCALE 1:2

RELEASED
07.11.07**D3121-15 BRACKET (SHOWN)****D3121-16 BRACKET (OPPOSITE)**

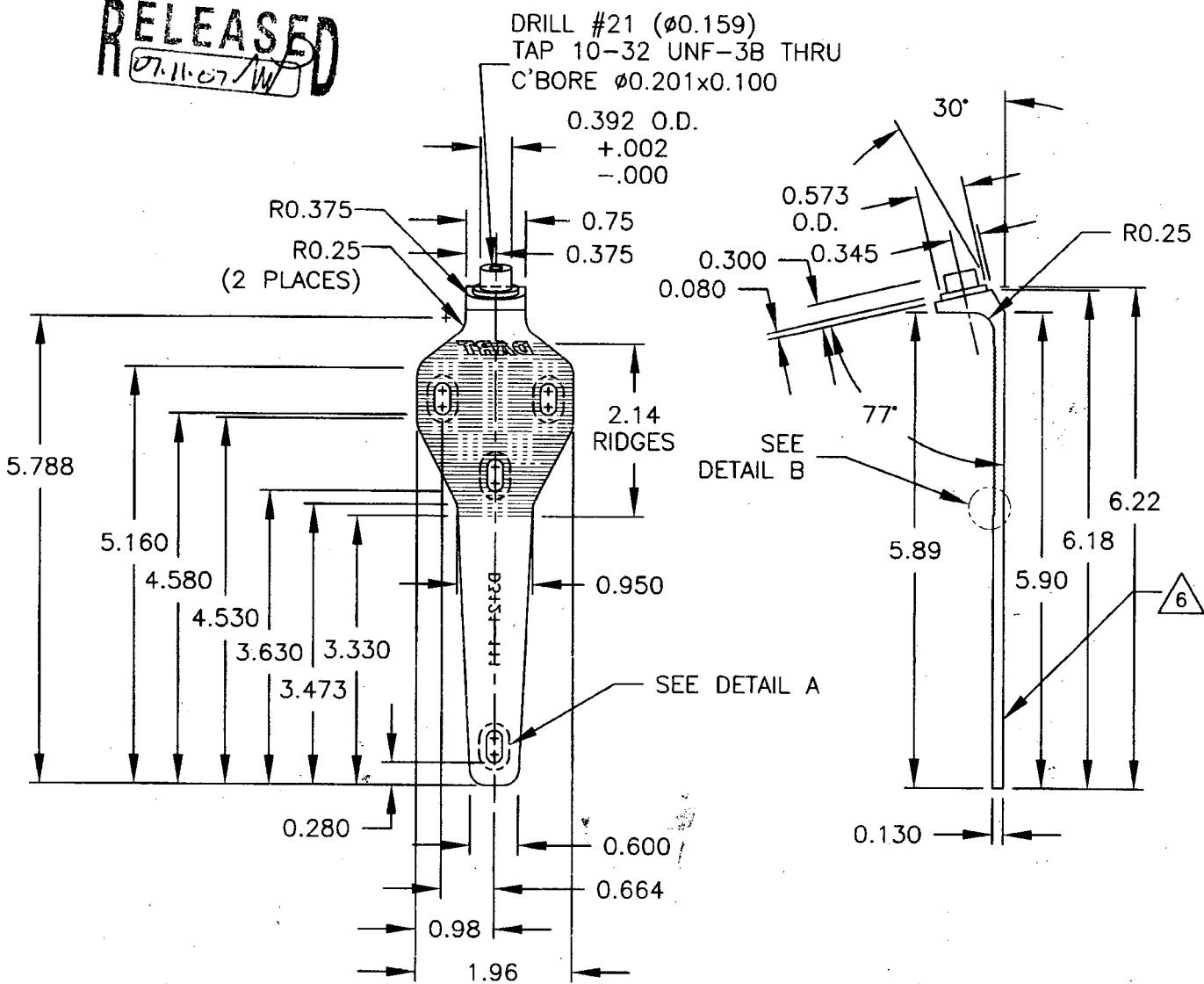
- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

10/01/01



DESIGN <i>AS</i>	DRAWN BY <i>CE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>AS</i>	APPROVED <i>AS</i>	DRAWING NO. D3121	REV. E SHEET 7 OF 10
DATE 07.11.07	TITLE BRACKET ASSEMBLY		SCALE 1:2

RELEASED
07.11.07 / W



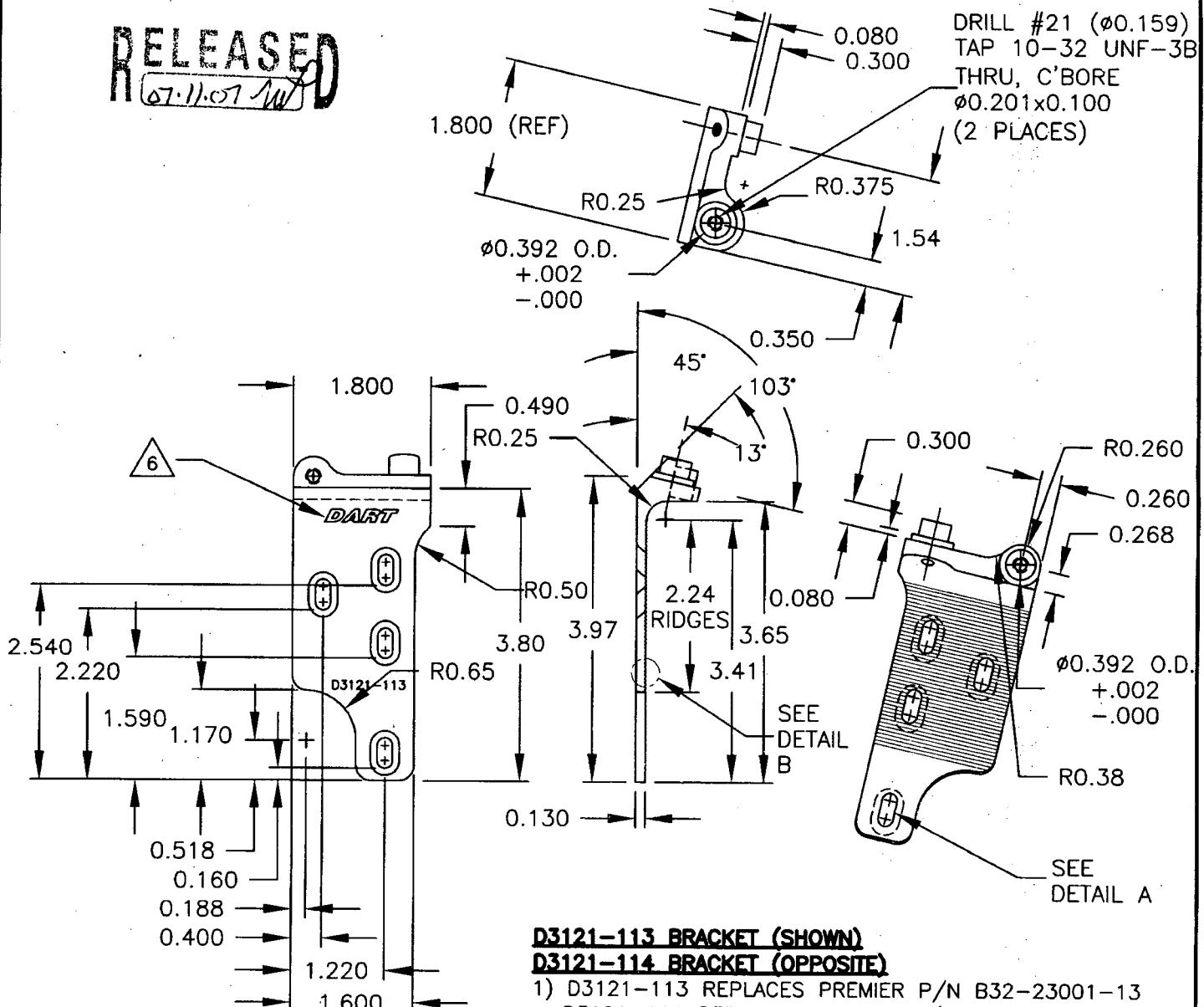
D3121-111 BRACKET

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

106135

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3121
DATE		REV. E SHEET 8 OF 10
07.11.07		TITLE SCALE BRACKET ASSEMBLY 1:2

RELEASED
07.11.07 113

**D3121-113 BRACKET (SHOWN)
D3121-114 BRACKET (OPPOSITE)**

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN. ULTIMATE TENSILE STRENGTH = 150 ksi
MIN. YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

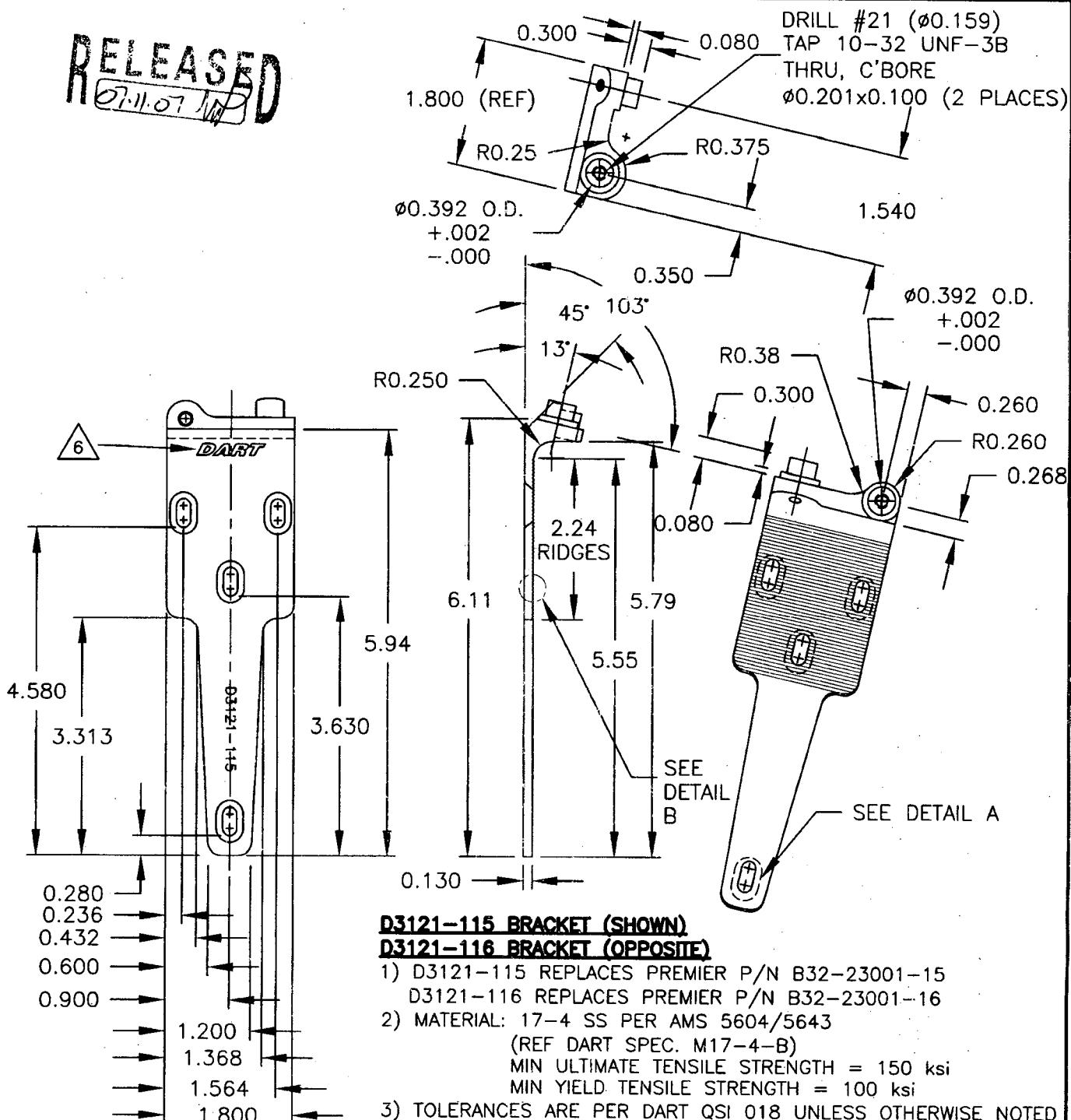
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DESIGN <i>AS</i>	DRAWN BY <i>CE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED <i>AS</i>	APPROVED <i>AS</i>	DRAWING NO. D3121	REV. E	SHEET 9 OF 10
DATE 07.11.07	TITLE BRACKET ASSEMBLY			SCALE 1:2

RELEASED
07.11.07 100



D3121-115 BRACKET (SHOWN)

D3121-116 BRACKET (OPPOSITE)

- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15
D3121-116 REPLACES PREMIER P/N B32-23001-16
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

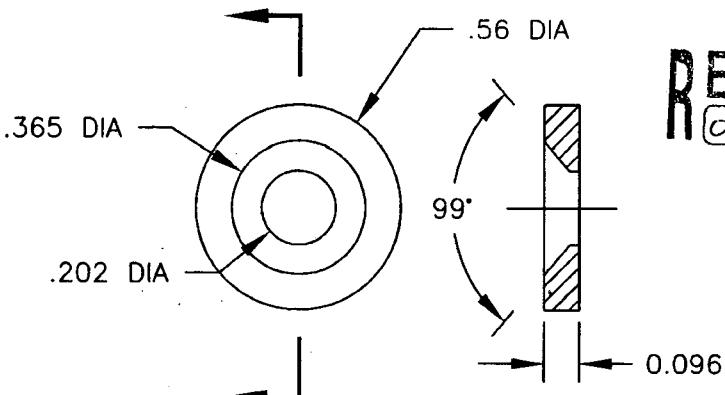
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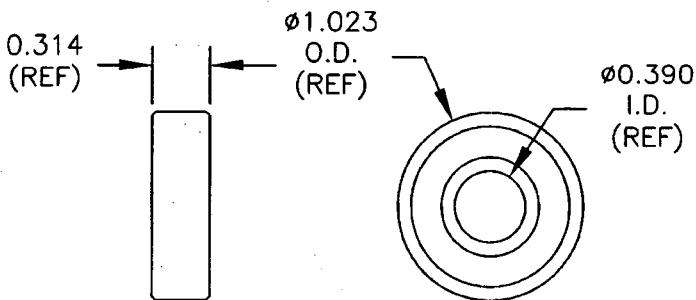
DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D3121
DATE		REV. E
07.11.07		SHEET 10 OF 10



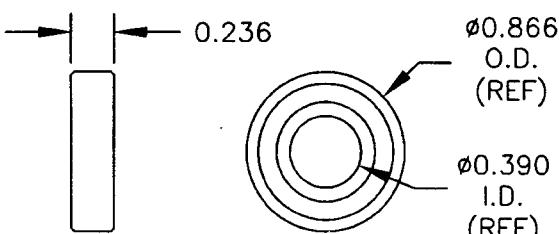
D3121-17 WASHER (SCALE 2:1)

- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



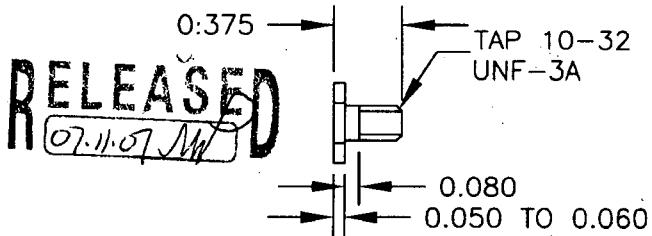
D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM
FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



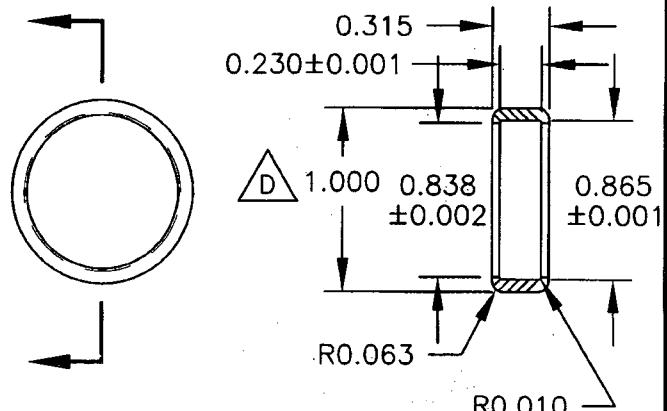
D3121-23 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z
OR KML P/N 6900-ZZ
- 2) ALL DIMENSIONS ARE IN INCHES



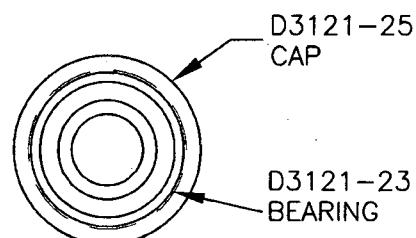
D3121-21 BOLT (SCALE 1:1)

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-25 CAP (SCALE 1:1)

- 1) MATERIAL: DELRIN ROD, Ø1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES



D3121-241 BEARING ASSEMBLY (SCALE 1:1)

5/2/02